LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNA."

Vol. IX. LOUISVILLE, JANUARY 17, 1880. No. 3.

R. O. COWLING, A. M., M. D., and L. P. YANDELL, M. D.
EDITORS.

BRAIN-CULTURE.—Dr. Crichton Browne, one of the editors of "Brain," and one of the brightest and most charming men in England, and whose speeches and dinners are equally excellent and famous, is thus quoted by the Lancet:

The habit of eating excessive quantities of animal food, particularly in cases where the individual is exposed to many and frequent causes of irritation, I condemn, and the wisdom of treating "minor degrees of brain-irritability by a reduction of the butcher's bill" is suggested. This is a matter of strong practical interest. The soundness of the policy recommended has been attested by direct experiment. Dr. Crichton Browne directs attention to the increasing number of persons met muttering and gesticulating to themselves in the streets. This he regards as an ominous sign, betokening an increased tendency to "irritability of brain-tissue and a loss of inhibitory power." The power of inhibition, implying restraint and control, is without doubt the conservative and health-preserving faculty, besides which it gives the steadiness of reserve to character and action. The practical consideration thus again pressed on public attention deserves higher consideration than it has received. Further inquiry is needed as to the precise relations of food- and brain-force. Pending the result of deeper research, experiment and reason combine to show the need of restraint in the use of animal food where sustained intellectual work is required rather than explosive mental effort.

We have observed these "mutterings and gesticulations," that Dr. Browne alludes to, on the streets of London and elsewhere; but more frequently on London streets than elsewhere simply because there are more people on London streets than on others, we opine. But, instead of charging these phenomena to meat, we would lay them at the door of drink. Surely brandy rather than beef, and malt liquors more than mutton, and punch more than pork and poultry, and vinous drinks rather than veal, are apt to make people talk to imaginary auditors, and gesticulate in the enforcement of their arguments.

Dr. Browne is an ardent alcoholist, and thinks of it as loyal subjects believe of their king, that it can do no wrong.

But Dr. Browne goes too far in his prejudice against meat. Of course boned turkey will fly to one's head sometimes, and game may rise to the brain and produce a temporary flutter of excitement on a festive occasion; but as for English or Kentucky roast beef or mutton being dangerously stimulating articles of diet — perish the injurious and unjust thought.

In the language of Dogberry, the idea is "tolerable and not to be endured."

APIUM GRAVEOLENS IN RHEUMATISM.—Celery has long been popularly credited with decided virtue in the treatment and prevention of rheumatism; and while the chances are that it is without special merit, its trial is advisable. It is only by experiment that therapeutics may be advanced. The celery should be cooked to develop its medicinal quality. That which is not bleached contains the largest amount of essential oil. Stewed it is a palatable dish, of delicate flavor, glutinous like okra. It goes well with fowls or game. It is a pleasant addition to soup. A lay journal thus speaks of celery as a medicine:

It is asserted that rheumatism is impossible if this vegetable is cooked and freely eaten. Its being almost always put on the table raw prevents its thera-

peutic powers from becoming known. It should be cut in bits, boiled until soft, and the water drunk by the patient. Put new milk, with a little flour and nutmeg, into a saucepan with the boiled celery; serve it warm, with pieces of toast, or eat it with potatoes, and the painful ailment will soon yield. Such is the declaration of a physician who has again and again tried the experiment, and with uniform success. English statistics show that in 1876 three thousand six hundred and forty persons died of rheumatism.

APPROACHING.—Several years ago an irritated contemporary, wishing to say something mean of the LOUISVILLE MEDICAL NEWS, called it a "medical newspaper." The Boston Medical and Surgical Journal and the Medical Gazette of New York, in calling attention to the extensive additions they have made with their January issues, announce as their chiefest pride that their journals will be prominently medical newspapers.

The votaries of Listerism must search out some agent more efficient for the destruction of bacteria than carbolic acid, since it is established that they often exist as long in it as they do in water. This fact alone, we think, would satisfy any one open to conviction that the good results reported as having come from antiseptic measures are more due to cleanliness and carefulness than to the "sublime influence of carbolic acid."

LIGHTNING WHISKY.—Alcohol has lately been made by electricity in the hands of Berthelot, according to the Scientific American. We venture to predict that Kentucky Bourbon is vastly better. This act of Berthelot smells strongly of filching fire (water) from heaven. He should be careful.

THE number of new medical journals that have as yet put in an appearance for 1880 is not as large as might have been expected with the improvement in the times. Many of the old ones have been enlarged.

Original.

EXSECTION OF THE HIP-JOINT FOR MORBUS COXARIUS.

A Lecture delivered to the Class of Bellevue Hospital Medical College.

BY LEWIS A. SAYRE,

Professor of Orthopedic Surgery, Bellevue Hospital Medical College; President of the American Medical Association; etc.

[Reported for the LOUISVILLE MEDICAL NEWS by F. Gundrum, M. D.]

Gentlemen: As I have no case to demonstrate this operation on to-day, I shall have to content myself with a dry specimen;* but by remembering the anatomy of the region in which this operation has to be performed, as you have often had it demonstrated to you, and made dissections of that region on the subject yourselves, with this anatomical knowledge in your minds I hope to make the operation, in all its details, so plain that any one of you may be able to perform it as well as myself, as it is not a very difficult or dangerous operation.

In the first stage of hip-disease, whether the inflammation begins in the ligamentous, serous, cartilaginous, or bony structures, by proper treatment we can, as you have seen, in the great majority of cases arrest the progress of the disease, so that the limb in a few years will be nearly or quite as good as its fellow. In the first stage, when seen at the beginning, you will in many instances be enabled, by keeping your patient in bed and producing absolute rest of the joint, to arrest the morbid process in a few weeks; and by protecting the joint for a while, to prevent a reëxcitation of the disease, you will have the satisfaction of seeing your patient make a complete recovery. If, however, the inflammatory process is of marked severity, accompanied by considerable pain, it will be necessary not only to put the patient and limb to rest, but local bleeding by means of leeches or cups, followed by cooling lotions, or, if these are not well tolerated, warm fomentations. If in a few days the inflammation and pain do not give way to this treatment, apply blisters of moderate size, and repeat them if necessary. These are the means to successfully combat the first stage of this disease.

But if the case has not been seen in the first stage until effusion has taken place, or

*Patient upon whom Prof. S. expected to operate was given permission to leave the hospital for a short while, and failed to return in time.

if in spite of your treatment—as sometimes, though rarely, happens—the case goes on to the second stage, the stage of serous or purulent effusion, then our treatment must be changed, especially in regard to the rest of the patient.

Rest of the diseased joint is indicated now as much as before, but it takes too long to cure the disease to have the patient remain in bed. You might possibly cure some of your patients by keeping them in bed for months or years; but while you are curing cases in this way some of them would die from exhaustion, and those that recovered would have their constitutions permanently impaired from the long confinement.

We must devise some plan to protect the joint, to keep the diseased surfaces from rubbing on each other, and thus prevent continual friction and irritation.

The next important element in the treatment is to supply to these sufferers nature's two greatest tonics, pure air and sunshine, which will invigorate the health and increase the appetite. They are far superior to any other means I know of. I find that as soon as you relieve these patients from pain, and give them plenty of outdoor life, they need no medication; for these agents are much more efficient than any thing you can get out of your drug-shops. This, with good, wholesome food, and plenty of it, is about all they need. However, it may be necessary in some cases to resort to medicinal agents, such as iron, cod-liver oil, quinine, and other tonic agents; and occasionally *very* minute doses of the bichloride of mercury might be admissible if, as is claimed by some, this agent in very minute doses increases the number of the red globules of the blood.

But should the effusion go on; should it continue to pour out into the joint, enormously distending it, cause abduction and extreme external rotation of the limb, which change of position must take place in proportion as the joint-sack becomes distended—the patient will have excruciating pain. He will suffer in proportion to the distension of the capsular ligament. When this becomes filled to its utmost capacity the pain is of the severest character, and soon completely prostrates the nervous system. Under such circumstances you should draw off the fluid by aspiration. This is a simple operation, which will render your patient great relief.

Introduce the aspirating needle into the synovial cavity and gradually withdraw the fluid; and while you are doing this let your assistant gradually invert and adduct the limb. When the fluid is all withdrawn keep the limb strongly inverted and adducted, while you withdraw your aspirating needle and quickly seal the wound. Do not allow him to evert or abduct the limb until the wound is hermetically sealed; for should you incautiously permit air to enter into the joint, you might soon have to regret your carelessness by seeing suppuration of of the synovial sack follow, with all its direful consequences. After having sealed the wound it is best to apply some fixed apparatus or a plaster-of-Paris bandage, to prevent any possibility of motion for ten or fifteen days, when all danger from the operation will have passed. My preference is to place the patient upon the wire cuirass, where the limb can be held in perfect position and under full control.

Suppose, on aspirating the joint, you find pus; then withdraw your needle and make an incision—not a mere puncture, but a free opening, out of which the pus will not find the least difficulty of escaping. You may now still hope to cure your patient, but not with as good result, although some of these patients go through the suppurative stage of the disease and still come out with a remarkably good limb.

You will now often obtain, upon moving the joint-surfaces one on another, crepitation, but not necessarily so.

Sometimes the cartilage breaks down or degenerates into a gelatinous or pulpy mass, that prevents the denuded bone-surfaces from coming in contact with each other and thus prevent crepitation. So remember, in these cases, where suppuration is going on you may have carious bone-surfaces, or necrosis, and not have what is so characteristic of this condition—namely, crepitation.

Should your case progress unfavorably in spite of all your efforts, or should you be called upon to treat a case where the health of the patient is gradually but surely failing, suppuration continually increasing, and hectic well established, you must come to nature's aid and help her remove the offending matter—the dead bone. She (nature) has been trying hard to remove the difficulty, but her process is too slow; and unless aided by you the patient must succumb before the operation is completed.

In many cases greater mischief is going on than we suspect. Great damage is done to the acetabulum and contiguous bone-tissue. Sometimes, when the disease begins in

the acetabulum, the head of the femur fits so tightly as to interfere with the escape of pus. Under such circumstances the pus is obliged to force its way toward the pelvic cavity. As the bone-tissue which forms the acetabulum succumbs to the ulcerative process, and finally coming down to the internal periosteum, this is separated, sometimes for a considerable distance, forming deep pockets for the pus to remain and undergo decomposition. Fortunately in such cases, as the disease approaches the periosteum, this membrane becomes strengthened and thickened, which prevents the pus from finding its way into the pelvic cavity; but cases have occurred where even this last barrier has been perforated, the rectum as well, and the pus escaped through the anus. Under such circumstances we are liable to be deceived on account of the small amount of pus escaping through the external sinuses. Pus must have free vent, especially when it is produced in joints, for here pent-up pus will do great mischief.

In all these cases the damage done to the hard structures is necessarily grave. The cartilage swells, becomes soft and pulpy, and breaks down; the bones ulcerate or die; the periosteum becomes thick and less firmly attached to the bone, from which it can be readily peeled off.

When it becomes necessary to operate do not delay too long, until the patient has almost succumbed to hectic, so near that the operation is the last straw upon the camel's back, or till pyemia or waxy degeneration of the kidneys and liver have done their work but too effectually.

This delay is one of the reasons of so many failures, and has attached much opprobrium to the operation. You can do in fifteen or twenty minutes what will take Dame Nature five or ten years; namely, to get rid of a piece of dead bone.

The operation should be performed as follows:

Having anesthetized the patient, turn the diseased side uppermost. Take a strong scalpel, with a large handle, that you can grasp firmly. Do not take it between your thumb and forefinger, as if you were going to operate for cataract. This is no delicate operation, such as many of those the oculist has to perform, that requires great lightness of handling the cutting-instrument, but your incision must be bold and decisive.

The point at which you begin your incision should be just midway between the anterior superior spine of the ilium and trochanter major. (My son just tells me that Dr. Stephen Smith says, in his valuable work on operative surgery, that I direct to begin the operation midway between the anterior inferior spine of the ilium and great trochanter. I am very sorry the book contains this error. I think it must be typographical, as Dr. Smith is scrupulously accurate in all descriptions of operations, so far as I have examined his work.) At this point, midway between anterior superior spinous process and the trochanter major, place your knife perpendicularly, with the cutting-edge toward the trochanter major, and sink it until the point of the knife strikes the ilium just at the upper edge of the acetabulum; then carry it, all the time hugging the bone, on a gentle curve down toward the trochanter major, so as to strike it a little behind its vertical center. Now carry the knife down the thigh, so that the whole length of the incision will be from four to six inches, according to the size of the patient. Sometimes this length has to be exceeded.

If you have made your incision properly, the soft structures and periosteum should be divided; but if you have not done this in the first incision, you must continue in the same line till you have completely divided every thing down to the bone. Never, under any circumstances, cut the external soft tissues at right angles to your first incision, as some operators have done. The divided tissues must now be separated and kept well apart by retractors held by assistants. You now take a probe-pointed curved bistoury and divide periosteum transversely midway between trochanters major and minor.

Make the incision through the periosteum as far around the bone as possible, which you will be able to carry nearly or quite one third of the way around. Now peel off the periosteum from the bone by means of this knife, which I have had made expressly for this use, which I call my "oyster-knife;" but if you want to speak more scientifically, you may call it the "periosteal elevator." With this knife you separate the periosteum from the bone as far around as possible.

In this manner you leave all muscular attachments which will perform their physiological functions when the diseased bone has been replaced by a new one from the periosteum which you leave.

When you come to the fossa above and behind the trochanter major, known as the digital fossa, you can not separate the periosteum here. The attachments of the rotators of the thigh are so firm that you will

be obliged to sever them with a knife. In doing this you must hug the bone closely, or you may wound a branch of the internal circumflex artery and produce troublesome hemorrhage. Keep this fact well in your mind; for should you wound this vessel, it will cause you a great deal of trouble, and may prove a source of great danger to the life of your patient. I have never had to tie an artery in the seventy-three cases in which I have operated. It is not a nice thing to be obliged to ligate a small vessel so deeply situated in the tissues as this.

Having peeled off the periosteum around as far as possible, and cut away the muscular attachments in the digital fossa, abduct and depress the thigh gently and gradually, so as to raise its head out of the cotyloid cavity, and while this is being done peel off the remaining portion of the periosteum on the inner side down to the transverse incision. Use great care in having the femur adducted and depressed; see that it is done gradually and not by jerks, or you may tear the periosteum away further down than your transverse incision, and away from the bone below, which would prove a detriment to the patient.

Having freed the bone and raised it out of the wound sufficiently, saw it off, just above the trochanter minor, with a chain- or finger-saw. I prefer to use the finger-saw when the bone can be raised up sufficiently. *Never, under any circumstances, cut off the bone with bone-forceps;* for you will splinter the ends of the bones more or less, which will cause sloughing of small spiculæ, and will retard the favorable progress of the case if not actually prevent what might otherwise have been a favorable termination. Always saw off the bone below the trochanter major; for should you leave this part, it interferes with the discharge of pus, and might make your operation a failure. Always leave the trochanter minor intact if possible, so as to leave the attachment of the conjoined tendon of the psoas magnus and iliacus, which is inserted at this point. Now examine the end of the bone carefully and see if it is healthy. If you find the bone diseased—looks dark, dull, bleeds readily, and breaks down easily—then you must peel off the periosteum down further until you have reached *healthy bone*, then saw it off. You must go down until you saw through perfectly healthy bone. The best way to denude the bone of its periosteum, if you have to go lower than your first incision, is to push up the femur out of the periosteum, as you would push a turkey's neck out of its skin after its head has been cut off. This will, however, leave a hole for pus to collect in. In order to avoid this an incision should be carried through the periosteum and soft parts, continuous with the first incision, as far as you have taken off the bone, so as to establish a free and perfect escape for the pus.

Now we must turn our attention to the acetabulum. Here we must exercise the greatest precaution; remove the dead and diseased bone-tissues by means of the periosteal elevator, scoops, gouges, etc., scraping it out until we have reached *healthy bone.* If you find that the disease has been extensive and actually perforated the acetabulum, examine closely and see if pus has not separated the pelvic periosteum and formed pockets between it and the bone, from which it can not readily escape. If you find such a condition, you must cut away the bone until you have established free escape for the pus, and leave no pocket for it to burrow in. Due care should be exercised when nothing remains in the bottom of the acetabulum but the pelvic periosteum, although it (the periosteum) is now thicker and stronger than in its healthy state, that you do not penetrate it with some instrument.

You may sometimes meet with cases where the head of the bone is forcibly retained by an abundance of osteophytes around the acetabulum. If such is the case, you can not raise the head of the femur out of its socket without using great force, which might break the shaft of the femur, which has been done four times, once by myself. The better way to do under such circumstances is to saw off the bone first, then you can extract the head by strong forceps or nippers.

Gentlemen, you have heard me talk of peeling off periosteum, and you have no doubt heard a great deal said about it by others. You hear men talk of peeling off healthy periosteum as though it were a very trivial affair. In the class of patients we now have under consideration, or in disease of bone of long standing, the periosteum becomes thick and loosely attached to the bone. Under such circumstances you will be able to separate it from the bone with considerable ease and facility; but when you hear a man state that he can separate healthy periosteum from bone, don't believe him; it is all moonshine; it can not be done. If you don't believe what I say, go up into the dissecting-room and try it for yourselves.

Now, having removed all dead and dis-

eased bone possible, wash out the wound with warm water so as to float out all particles of bone debris, for should you leave any, however few or small, they would keep up prolonged suppuration and cause a great deal of unnecessary suffering. After the wound is thoroughly washed out, pour it full of the balsam of Peru, and fill it with oakum. The latter procedure should receive the greatest attention, as it is extremely important. The oakum must be firmly pressed into the bottom of the wound so as to keep the caliber of the periosteum, out of which the bone was enucleated, as large as it was, so that as the new bone forms from it it shall be as large and strong as that part in the opposite leg. If this important part of the dressing is neglected the new bone will be smaller and weaker, consequently of little or no utility. Now fill the wound in the soft tissues to the top, and over this place a thick wad of oakum; bandage it firmly by passing a roller round the pelvis, which will prove an efficient aid in removing inflammatory engorgement and infiltration. Your patient is now ready for the bed. As the ordinary bed is entirely inefficient we must look for something better. That which I have found most useful is the wire cuirass, a modification of "Bonnet's grand appareil." This forms a perfectly comfortable bed, on which the patient can be carried out daily to take fresh air. Often I have seen patients carried a long distance immediately after the operation without giving them the slightest pain or inconvenience. The cuirass should be made so as to fit the patient accurately, and especially so as to have the anus come over the place in the instrument through which the fecal evacuations are to take place. If you neglect this your patient will soon soil the cuirass and dressings, and you will have to remove him, which you will find a difficult task for yourself, and very painful to the patient. Having placed your patient on the cuirass, extend the sound leg perfectly straight upon the leg of the instrument, screw up the foot-piece till it reaches the sole of the foot, and secure the foot firmly by means of a roller, then carry the roller up the limb, securely fastening it to the cuirass; when you get half way up the leg place something firm over the knee that will extend from the middle of the leg to the middle of the thigh continuously (two newspapers doubled up do as well as any thing). Now carry your bandage up over the paper or pasteboard on leg and thigh to perineum; having reached this point pass it upward and outward over the shoulder of the instrument, return the bandage back over perineum, and continue this until you have made secure and firm counter-extension; continue this same bandage around pelvis and cuirass until you have secured pelvis to the instrument. If your foot-piece is securely fastened you will find that you have made a perfectly solid column of the sound limb and pelvis, which holds the patient firmly for counter-extension, and we are now ready to properly dress the limb just operated upon. Place two adhesive strips, two to four inches wide, according to the age of the patient, on either side of limb, reaching from the middle of the thigh down, so as to go round foot-piece of the instrument, secure it with a roller from three to four inches above ankle up to the upper end of the strip. The foot should also be bandaged, then screw up the foot-piece to the sole of the foot and secure it by means of the ends of the plaster and a roller. Now bring down the foot of the diseased limb by means of the extension screw, as far as prudent, and daily increase this until the limbs are of as nearly equal length as possible.

Having brought down the limb as far as you can at the first dressing, carry a roller from the foot up to the perineum and round pelvis and cuirass so as to still further secure the patient against jars or motion.

[A young boy was utilized to show the dressings, and the advantage and beauty of having first made a solid column of sound limb and pelvis was clearly shown.]

In the course of from two to three days, or sooner if the dressings become very much soiled, it will become necessary for you to renew them. To do this take off the bandages from round pelvis and the oakum which was placed over and around the wound, and gently take the oakum out of the wound, but which is still better, float it out with warm water. From hence dress limb daily with oakum and balsam of Peru, always using the same precaution that you did in the first dressing, in filling up the wound, from its very bottom firmly. The great advantage of using oakum as a dressing is that you can not pack it so tightly that pus can not find its way through it freely.

I have obtained many fine results where two or three inches of the shaft of the femur was excised, and Dr. H. G. P. Spencer, of Watertown, New York, excised eight inches of the femur and obtained a very useful limb.

I attach much importance to the dressings

after the operation, as the subsequent progress and recovery of the patient depends greatly upon the accuracy with which these minutiæ have been attended to. If you perform this operation, gentlemen, as I have directed you, and exercise due care in the management of the case, and make your passive motions at the proper time, you may have the satisfaction of restoring what seem helpless cases of hip-disease to health and usefulness; but should you fail, you will have the consolation that you gave your patient the best and only chance for life.

Obituaries.

We chronicle with deep regret the death of Dr. Richard C. Thomas, of Bowling Green. While at the bedside of a patient Dr. Thomas, in his forty-first year, dropped dead on the 28th of December.

Dr. Thomas was one of the foremost members of the profession in Kentucky. He was a skillful and successful practitioner, a conscientious student, and a forcible and attractive writer. His bereaved family and the community in which he lived have our profoundest sympathies.

Correspondence.

INFLUENCE OF SHOCK ON MEMORY.

To the Editors of the Louisville Medical News:

Referring to the article by Dr. Cowling, in the American Practitioner for January, upon the Influence of Shock on Memory, the following, I think, will be found a very striking case in point.

In 1867 Mr. C. H. Pettit, of this city, contemplating the purchase of a horse, started with a friend in a buggy to drive the horse and test his qualities. Starting from a stable near the center of the city, he drove toward the House of Refuge, about three miles distant. When about three squares from the stable the horse shied badly, but nothing further unusual occurred till near the House of Refuge. Near this point Mr. P.'s friend got out of the buggy to observe the movement of the horse, while Mr. P. drove him. The horse became frightened, ran away, and Mr. P. was thrown out of the buggy violently to the ground. He was seen to lie still for a few seconds, but soon arose to his feet and started to run in the direction of the runaway horse. A gentlemen in a buggy driving toward the city, finding Mr. P. evidently injured, took him in with him and conveyed him to his (Mr. P.'s) residence.

I found his only serious injury was a fractured clavicle. He talked freely and intelligently, but evidently had no knowledge as to how he had been injured. Of the whole round of events connected with and preceding the accident Mr. Pettit was and has been since perfectly oblivious, except as to the start from the stable, the shy of the horse on the way, and his being assisted up stairs on his return home. I have this day conversed with Mr. P., and he assures me that he has never been able to recall any thing in relation to the drive or the accident except the three incidents I have mentioned.

LOUISVILLE. R. C. HEWETT.

Reviews.

A Guide to the Analysis of the Urine: For Physicians, Chemists, and Pharmacists. By Dr. C. NEUBAUER and Dr. J. VOGEL. Translated from the seventh edition by E. C. CUTLER, M. D. Revised by EDW. S. WOOD, M. D. New York: Wm. Wood & Co. 1879.

This work, first published in 1854, has now reached its seventh edition. It is the most complete of all the works upon urinalysis. The new style of binding, typography, and general arrangement of the book have been justly praised by contemporaries.

The first half of the book, by Dr. Neubauer, is devoted to the physiology and chemistry of the urine; the latter half, by Dr. Vogel, is devoted to clinical matters. We have but one fault to find with Dr. Neubauer's section; too much attention is paid to the chemist's requirements, too little to those of the practical physician. The analyses are somewhat complicated and laborious for the busy physician. The engravings are excellent, but the table of colors is not faultless; it is only approximative, and lacks some of the more important colors.

We commend this excellent book to our readers.

Transactions of the American Ophthalmological Society. Fifteenth Annual Meeting. Published by the Society, at No. 12 West Thirty-fifth Street, New York.

The Transactions are full of interesting papers by well-known ophthalmologists. The

contents are of interest to all, the general practitioner as well as the specialist.

Case of Sarcoma of Conjunctiva, reported by Dr. Dyer, of Pittsburgh, and the Statistics of Extraction of Cataract by the Flap Operation by Graefe's method, by Dr. Noyes, of New York, are of especial interest. The latter shows, in the extraction of 5,566 cataracts by Graefe's method, only 4.52 per cent of losses.

Other papers of great interest are contained in this number of the Transactions.

Books and Pamphlets.

A HISTORY OF SYPHILIS. Reprinted and enlarged from the original paper in Edinburgh Medical Journal. By J. L. Milton, Senior Surgeon of St. John's Hospital for Diseases of the Skin. London: Harrison & Sons, St. Martin's Lane, printers in ordinary to Her Majesty. 1879.

A DICTIONARY OF THE GERMAN TERMS USED IN MEDICINE. By George R. Cutter, M. D., Surgeon of the New York Eye and Ear Infirmary, Ophthalmic and Aural Surgeon to the St. Catherine's and Williamsburg Hospitals, etc. New York: G. P. Putnam's Sons, 182 Fifth Avenue. 1879.

THE HYGIENE OF THE SKIN. By J. L. Milton, Senior Surgeon to St. John's Hospital for Diseases of the Skin, Lecturer on Diseases of the Skin of St. John's Hospital, Member of the Harveian Society, Corresponding Member of the New York Dermatological Society. London: Chatto & Winders, Piccadilly. 1879. (The right of translation is reserved.)

A TREATISE ON THE SCIENCE AND PRACTICE OF MIDWIFERY. By W. S. Playfair, M. D., F. R. C. P., Physician-accoucheur to H. I. and R. H. the Duchess of Edinburgh; Professor of Obstetric Medicine in King's College; Physician for Diseases of Women and Children to King's Hospital; etc. Third American edition. Revised and corrected by the author. With notes and additions by Robert P. Harris, M. D. With two plates and one hundred and eighty-three illustrations. Philadelphia: Henry C. Lea. 1880.

The Louisville Medical News.

Back numbers of the LOUISVILLE MEDICAL NEWS, with several exceptions, can be supplied. The price is six cents per copy, postpaid. Persons wishing to complete their files of the NEWS would do well to order missing numbers early, as but few copies remain of several of the issues.

A limited number of bound volumes of the NEWS is in stock. These can be obtained at the following prices: The NEWS for 1876, Vols. I and II bound together, $3.50; 1877, Vols. III and IV bound together, and 1878, Vols. V and VI bound together, each $4.50, or the three years for $11.00, postpaid.

The bound volumes of the NEWS contain each six hundred and fifty pages filled with much matter of permanent value.

Address the publishers,

JOHN P. MORTON & COMPANY,
Louisville.

Miscellany.

SUGGESTIONS IN THE MANAGEMENT OF NATURAL LABOR.—The following is the conclusion of a paper read by Dr. J. W. Singleton, of Paducah, at the Tri-State Medical Society, at Evansville, November 6th (The Obstetric Gazette):

Let us ever stand ready, with pure hearts, devoted lives, and willing hands, skilled in the use of every agency our beloved science has devised or a wise experience approved, to promote the comfort and secure the safety of suffering woman in her truest, bravest, and most sacred duty to the world. And since even then we can not prove ourselves the sovereign arbiters of her temporal destiny, we can at least help her to triumph over some of the enemies of the puerperal hour. This succor, as the positive friends of the distressed and the chosen guardians of the temple of life, we should always be prepared to furnish and promptly render at all times and under all circumstances.

Safe confinement of child-bearing women, proper care of the maternal fruit, and the conservation of the health of both mother and child being the objective points of all our efforts, let us omit no means consistent with sound reason and common sense, however simple it may appear, if at all suited to the desired end, ever keeping in mind the great truth that in a vast majority of cases nature is equal of sound and healthy parturition, or she can often be induced to respond to the demands of the occasion by a little timely, harmless, and judicious cooperation on her part.

Conception, gestation, and child-birth are inestimable blessings to good and healthful women, if the sacred function of her sex escape the defilement of the base and the impure.

Woman conceives according to that wonderful law stamped upon the life-springs of her being as she came forth from the hands of the Creator in all the loveliness of unconscious beauty and artless grace. Through long and weary months she nurses next to her heart the maturing object of her hopeful expectation, with tender care and anxious solicitude. In due time she cheerfully submits to the inevitable. She goes to her couch of pain with a smile in her heart and kisses on her lips for the author of her suffering. Heaven and gentle spirits watch over her! The child is born. Born in the midst of joy and tears. Born, as millions have been

born before, in full accord with natural processes, which were developed into life and power when woman ate the forbidden fruit, "and men became as gods, knowing good and evil." Born as myriads are yet to be born to the end of time, till the afternoon of that day upon which the last man and woman shall disappear from the face of the earth; when our bandages, ergot, and instruments shall be forever laid aside, and the agonies of child-birth give place to the production of the race of "spiritual bodies," the immortal children of the "new birth," in a new world, without pain, without death, and without sorrow.

Conception, gestation, and birthhood are the sublimest manifestations of the God-power among men. Let no man uselessly or profanely invade the divine arcana of man's reproduction. The birth of a living child is the general climax of creative wisdom. Why may not the gods and men mingle their voices in joyful thanksgiving over the entrance of an immortal being on the shores of time!

Let us then, as conscientious obstetricians, faithfully watch at the portals of human existence, and tenderly welcome each trembling voyageur as he is launched forth on the sea of mental life. Let our pride in and our love and affection for our high profession become manifest in our tender and loving regard for our fellowmen, and especially for the mothers and babies, "whom we have always with us." And, above all, let us never forget that in the faithful performance of the responsible and delicate duties of obstetric practice there is scarcely a suggestion from the poorest and most illiterate midwife that may not have some practical good in it, and that there is no idea, however new or simple, concerning the management of labor and the treatment of parturient women that may not at some time in our professional experience minister materially to the comfort, relief, or safety of our patients in the lying-in chamber.

Finally, let us be watchful over the cases confided to our care. Let us keep our hearts pure and strong to do our whole duty in our ministrations of mercy; our brain steady, our hands unpolluted, soft, sympathetic, and intelligent. Let us "watch, therefore, and be diligent;" for in such an hour as he thinks not some one of us may become the honored savior of some good woman's life, and the medical father of one who will essentially lead his fellowmen through the paths of knowledge and virtue to a glorious deliverance from ignorance and sin, who, with heart and mind devoted to the good of mankind, will scatter the blessings of his beneficent life-work among the sons of men.

SHAMEFUL BIRTH-RATES IN AMERICA.—There are but five cities in America where the births are registered so the percentage to the population can be deduced. These are New York, Brooklyn, Providence, Washington, and Cincinnati. The returns from these cities make the births about one to every thirty-eight inbabitants. This is less than that of France even, which is one to thirty-seven. In Russia there is a baby to every twenty inhabitants. The birth-rate among native Americans is about half that of the foreign-born. It should be remembered, however, that the American birth-rates are those of the cities only, and even they are not complete.—*New York Medical Journal.*

A ZULU ENEMA.—One common mode of treating disorders of the bowels is by enema (Lancet). This is done by passing the small end of a cow's horn into the anus; a Kaffir or Zulu will then pour (generally sea) water into the large end, administering in this manner two or three pints at one time. This is retained for a while; the patient sometimes running about, jumping, and even standing upon his head. The fluid is then allowed to escape. This proceeding is frequently repeated.

LOSS OF TIME BY SICKNESS.—The average amount of time lost to each laborer in Europe on account of sickness, according to Dr. Edw. Jarvis, is from nineteen to twenty days each year (New York Med. Journal). That among students is from two to five days. According to the Massachusetts State Board of Health, during the year 1872 thirteen days' labor were lost by sickness for every productive person in the commonwealth.

DESERVED SUCCESS.—Our friends of the North Carolina Medical Journal give this pleasant record of their fortunate birth and prosperous life: The experiment which we began not without some misgivings at first, and contrary to the advice of some of our friends, . . has taken a strong hold on the profession, and is growing in favor steadily. Our circulation has largely increased, and we expect to double our subscription in the coming year.

Selections.

The Influence of Shock on Memory.—Dr. Richard O. Cowling, in the American Practitioner:

Mental depression, incoherence of thought, and absolute insensibility are of course the common symptoms accompanying shock, varying with its amount, and moments, hours, days, weeks, or even months of blank follow upon a jar of the brain, according to the degree of disturbance to which it may have been subjected. These are ordinary phenomena; but while it has been common to note the time at which the patient comes to himself and memory resumes its action, it is not so general to inquire as to what particular moment recollection vanished. I think we are generally content to date this from the time when the injury was received, and yet under some circumstances it will be found that there has been quite an appreciable period antecedent to this of which all record has been wiped from the brain; and this fact may be of importance in several ways. Several cases in my experience illustrating the truth of the proposition laid down, happening in swift succession, induces me to make a record of them.

I. A gentleman returning to his home one night went first to the front door to get in, but this being locked he went round the house to the back door. Alongside of this entrance were steep steps leading to an open basement, and the night being very dark he missed his way and fell into it, a distance of eight feet. When found, supposably within a half hour afterward, he was completely unconscious, and upon examination it was discovered he had a scalp-wound on the back of his head down to the bone, which was unbroken. He was restored to consciousness in a few hours, and the next morning was wholly cognizant of passing events, and several days later was about as usual. He retained no memory whatever of his fall, all recollection ceasing at the time when he turned away from his front door to go around the house, though after this he had to traverse a distance of a hundred feet to reach the point at which he fell.

II. Two weeks since I attended with Dr. J. A. Brady, of this city, a gentleman who had fallen through a hatchway of a warehouse, a distance of nine feet, into a cellar. He had a rib broken and a deep wound in his chin. Within a half hour after his fall he was removed to a carriage, assisting somewhat those who were helping him. He had great confusion of thought for several hours afterward, asking continually where he was, what was the matter with him, etc. He had a sharp surgical fever, an abscess developing in his jaw; but after the first thirty-six hours his intelligence was completely restored. He had no recollection of his accident. All he remembered was that he and his brother had entered the warehouse together at dark; that he had sat down by the stove near the front door and his brother had gone back some distance to the counting-room; that when he had warmed himself he rose to follow him. The rest was blank. From the stove to the hatchway was a distance of thirty feet.

III. Within a day or two of the time at which the above-mentioned accident occurred a man fell from the third story of the "Southern Dairy" (a "butterine" manufactory), into the cellar below—a distance of fifty feet. Saw the case an hour and a half later with Prof. T. S. Bell. The injuries sustained were a dislocation of the left ankle, with comminuted fracture of the lower end of the left tibia and fibula, a simple fracture of the right thigh, and compound comminuted fracture of the right ankle, the tibia having apparently been driven through the sole of the foot, crushing the astragalus and os calcis. The man was in profound shock, but quite conscious of what was going on around him; refused amputation, saying he would rather die. He lived seven days, and was apparently conscious up to the time of his death. He had at least full intelligence during several days of his illness, and gave about the following account of his accident: "It was early in the morning, about seven o'clock, and quite dark. I had the truck-wagon loaded with butter, and wheeled it (shoving it) to the elevator-way, the doors of which were open. As the back wheels passed over the ledge I found the wagon beginning to fall, and knew that the elevator was not there. In my fright I could not let go the handle of the wagon. I remember then the cold air rushing past me. I thought I had been falling a long time, and reached out my hands. Then I remember no more."

IV. On the night of December 13th a railway-train on the junction track between the Louisville & Great Southern and the Louisville & Cincinnati railways, passing through a suburb of the city, struck a horse attached to a wagon in which there were two men. The horse was cut loose from his attachments and killed, the wagon wrecked, and the men thrown violently to the ground. I saw them about an hour later. One of the men was nearly pulseless and quiet; the other was in great pain and violent at times, apparently bordering on delirium. I attended the cases with Dr. J. A. Larrabee. One of the men had a comminuted fracture of the right clavicle. After lying in considerable shock for several hours, reacted well, and his general condition progressed favorably. The other had a scalp-wound extending into his right temple down to the bone, in which there was a fissure an inch or more in length. He had also a dislocation at the right shoulder. His shoulder being reduced and his wound dressed, he became quiet; and at a visit paid twelve hours after his injury he was well at himself, and continued so. He remembered nothing of the events of the night in which he was injured subsequent to the time that he "turned the corner at Meffert's," at which point his horse was trotting slowly. This was about seventy yards from the place where his horse was struck. He said also that he heard no signals (bell or whistle) from the train. His companion remembers "nothing" of the event.

V. A boy aged five was in the habit of climbing out upon a window-sill, for which his mother had punished him. Entering the room one day, she saw him again in his perilous situation. Afraid to alarm him by speaking to him, she ran below to warn him back and to catch him in case he should fall. She was too late, however, finding him lying insensible on the pavement from a fall of a dozen feet. The injury sustained was apparently a fracture at the base of the skull, hemorrhage and a serous discharge coming from his ears. He recovered, however, and his consciousness returned in forty-eight hours. His account to his mother of his fall was: "I was n't bad, mamma. I got out on the window, but I got back before any one told me."*

The comments I have to make on the cases narrated shall be brief. They are:

First. That the point at which memory leaves

*The report of this case has been kindly furnished me by Prof. D. W. Yandell.

in injuries accompanied by great shock seems to be at the record of the last prominent idea. In the first case the walk around the house was monotonous, and the gentleman was no doubt all the while occupied with the circumstances connected with his not getting in his front door as he had at first intended. In case second the prominent idea of the man was in leaving the comfortable stove to join his brother. In case third memory seems to have faded only a moment before or just at the strike. In case fourth "Meffert's" was the last landmark. In case fifth it was the mother's injunction.

Second. The points noted seem to establish the fact of euthanasia in cases of violent death, not only as to actual pain inflicted by the injury, but as to the anticipation of the horrible event.

Third. The testimony of the individual upon the circumstances leading to his accident is to be taken with a certain amount of reserve. In case fourth the engineer of the train has of course declared that he did make the signals, etc.

Note on the Excretion of Urea.—John Haddon, M.A., M.D., in Edinburgh Medical Journal:

The secretions and excretions of the body must, if properly interrogated, be capable of giving information as to how the functions of the various organs of the body are being carried on; but that we may be able to gain much information from such interrogation we must first know the function of each organ, as well as the normal condition and action of its secretion and excretion. It is common to look at the feces during some diseases, and we think we gain information by so doing; but ideas vary much as to the normal color of feces in health, and no attempt has been made, so far as I know, to examine minutely the feces in disease. The importance of the examination of the urine in disease is admitted by all; but I believe it is more common to examine it for abnormal ingredients than to inquire into the relative amounts of its normal constituents.

In the winter of 1878 I began to estimate, by Dupre's process, the amount of urea in the urine of some of my patients. Physiologists are at variance as to the organ in which the urea is formed; and although I did not hope to be able to settle the question by examining the urine in disease, still I thought some facts might be ascertained which might warrant an inference. One of the first cases whose urine I examined was that of a man convalescing from an attack of, probably, typhoid fever. He passed twenty-four grams of urea in twenty-four hours. The next was that of a young man in whom I suspected incipient cirrhosis of the liver. He passed twenty-two grams of urea in twenty-four hours. The next was that of a lady suffering from rheumatic pains in the shoulders, knees, and ankles, with swelling of the joints of the hands and feet, without any pyrexia. She passed 2.6 grams of urea in twelve hours from night to morning. The next was that of a woman who drank more stimulants than she ought, and suffered from edema of legs, with an eczematous state of the skin over the shins. She passed 1010 c.c. of urine, specific gravity 1008, without albumen, and containing seven grams of urea, in the twenty-four hours.

There was so much variation between the cases that I determined to observe my own urea excretion, which I did during the whole month of December, 1878. During that time I noted my diet, but did not measure the quantity. I noted the amount of exercise I had, and the state of my health as judged by my feelings. The following are some of the results I found:

1. Urea: maximum, 27 grams; minimum, 13.5 grams; average, 18.5 grams. Urine: maximum, 1610 c.c.; minimum, 680 c.c.; average, 980 c.c. Specific gravity: maximum, 1031; minimum, 1017; average, 1024.

2. Having made a diagram of the urea, urine, and specific gravity, I found that, roughly speaking, the amount of urine and urea varied directly, while those varied inversely as the specific gravity.

3. I could not notice any effect upon the urea by variations in my diet.

4. I never had exercise to fatigue me, and did not notice any variation in the urea with the varying amounts of exercise.

5. As to my bodily feelings: when the urea was most abundant I was buoyant and well. When it was low I felt languid and out of sorts. I was much struck by that fact. Did I feel well because I passed much urea? or did I pass much urea because I was so well? What organ was it whose action so regulated my feelings?

6. The curve of the urea began low, rose gradually till it reached its highest point on the 8th, fell gradually till it reached its lowest point on the 16th, rose again till it reached the top of the next curve on the 24th, and then fell, remaining about the average at the end of the month.

7. Considering the character of the curve in my case, the average could not have been ascertained by observations extending over less than ten days. The general practitioner does not need to be told of the difficulty he would have in trying to estimate the urea for ten days, with any thing like a chance of accuracy. It is practically impossible; and as single observations are useless, and even several consecutive observations not to be relied upon, to establish the average urea excretion of any individual, it is evident that if any information as to the organ, or tissue where urea is formed, is to be gathered from pathological observations, such observations must be undertaken in hospitals.

Causes of Error in the Sugar-test of Urine. M. Jolly has communicated to the Society of Practical Medicine the following (St. Louis Medical and Surgical Journal): Barreswill's, Fehling's, and other cupro-alkaline solutions, if more or less diluted, undergo a spontaneous decomposition, as was shown long since. Besides this, it is necessary to abstract certain organic matters in the urine, which have a reducing action on salts of copper, and which, on that account, might lead us into error. To effect this a small quantity of sub-acetate of lead is first added to the urine and the precipitate separated by filtration. The excess of lead in the filtrate is separated by adding *pure* sodium carbonate. The filtrate is then tested for glucose, the presence of the sodium carbonate having no influence on the test. This salt, however, must be chemically pure, as the commercial article contains impurities having also a reducing action on salts of copper. What these impurities are the author has not been able to determine, as a variety of experiments with pure sodium carbonate, to which the impurities occurring in the commercial article were added, did not act in the same manner. The observation holds good, however, and to obviate errors, the course detailed above should be pursued. —*La France Médical.*

XUM

Decayed Teeth—Importance of Milk Food. From Edinburgh Medical Journal:

Not the least valuable among modern arts is the art of mechanical dentistry—a development of the necessity of the age in which we live, for it does not appear in the centuries past that the construction and fitting of artificial teeth was practiced, nor, so far as our investigations go, required. Certain it is that at no period in the history of the human race has the decay and destruction of these organs gone on so rapidly as during the present generation. Not in age nor in middle life only, but even among the young the display of a fair set of teeth is too often due not to "nature's art divine," but to the skilled handicraft of the dentist. From what cause this early decay arises, and how far it is remediable, are considerations of no light import, so far as the future health, strength, and happiness of our descendants are concerned.

Mr. Skaife, of the Blackburn Infirmary, who has for many years been intimately associated with the diseases of factory operatives, in an address delivered at the annual meeting of the Lancashire and Cheshire branch of the British Medical Association, says, "I notice this decay of teeth very closely, and I am considerably within the mark when I say that there would not be one case of entire teeth to two hundred cases in which the teeth were more or less destroyed." Our leading dentists would no doubt afford similar testimony among the so-called "upper classes."

Mr. Skaife, not without some show of reason, considers that a dietary in which milk is almost entirely wanting contributes largely to the destruction of the dental structures, tea having for many years been substituted for the milk of bygone days. Doubtless no other article of food contains so much of the phosphates, and its importance in the formation of the bony skeleton is universally recognized. A lady unable to suckle her infants has brought up five children upon various patent foods with very hard names and very long prices; every child in succession has become bow-legged as soon as it was able to walk. After her last accouchement she was persuaded to rear baby number six upon milk, and milk only, of course properly diluted, the result being that this little girl possesses the only handsome pair of legs in the family. Now, if decayed teeth among the Blackburn operatives resulted from defective milk-supply, much more should rachitis and mollities ossium in their various forms be prevalent; but of them Mr. Skaife makes no mention whatever, although he speaks very feelingly of the ravages of scrofula.

Disinfecting a Hospital.—[The results were all that could be desired. If disinfectants exist they are chlorine gas and sulphurous acid gas.] Prof. Doremus, in the Pharmacist:

Strips of paper were pasted over the crevices around the windows and doors. Troughs of lead, as before described, were brought into the ward; a sack of salt was emptied into them, and about an equal weight of black oxide of manganese. These were intimately mixed, by stirring them with water, by means of wooden shovels. A carboy of sulphuric acid was emptied into pitchers, basins, and other vessels, and placed by the sides of the troughs. The floors were then wetted with water, and steam was allowed to escape from the heaters until the condensed moisture had dampened the ceilings and was trickling down the walls. Half a dozen assistants groped their way with me through the mist to the sides of the most remote trough; each of us simultaneously poured out the contents of the vessels filled with sulphuric acid upon the salt and manganese, repeating this operation at the second trough. We then hastily made our exit, and nailed up the door, lest any one should accidentally enter; for the amount of chlorine thus liberated would have proved fatal to any one who might have ventured into its presence. The next day the windows were opened from the outside, and after an hour or more of ventilation we entered, and having first filled the earthen vessels with sulphuric acid, we stirred up the mass resulting from the previous day's reaction, then added this second dose of acid, and again rapidly retreated and secured the door.

In the first ward, where pyemia had proved most fatal, the contents of the troughs, chiefly sulphate of soda and sulphate of manganese, were removed, and a second sack of salt with its equivalent of peroxide of manganese were mixed in them with water, and the full complement of sulphuric acid poured into the mixture, after filling the compartment with steam as before. The walls and floors were then washed and scrubbed, after a third liberal treatment with chlorine was completed, twenty-four hours having been allotted for each dose of chlorine to fulfill its fell purpose, viz. to permeate the *plaster walls* and *very stones* of the hospital in search of its prey, the foul, death-dealing gases and germs that lurked in these hiding-places defy all ordinary methods of removal.

After a day's ventilation and drying the disinfection was considered complete. It was a pleasure to pass from the adjoining wards into the purified one; the mawkish flavor, so common to even the most cleanly hospitals, had entirely disappeared.

To test the efficiency of the chlorine gas the cotton sheets were left on some of the beds when the first charge was employed. The next day these sheets were so tender that the least touch sufficed to crumble them to pieces. The woolen blankets were disinfected, but uninjured.

The method described for generating chlorine is preferable to the employment of hydrochloric (muriatic) acid and the binoxide of manganese, because of the more copious yield of gas, as may be shown by the following formula: $2(SO_3H_2O)+MnO_2+2NaCl = SO_3MnO+SO_3Na_2O+2(H_2O)+Cl$.

The Precursors of Cancer.—(Med. Record.) At a recent meeting of the London Clinical Society Mr. G. Lawson read the notes of a case of cancer of the breast following eczema of the nipple. In the subsequent discussion a number of prominent surgeons took part, including Sir James Paget and Mr. Hutchinson, and some interesting facts were brought out. It was pretty generally agreed that there were a number of chronic disturbances of nutrition, which, if neglected, ended in cancer, when the cancerous period of life came on. Thus eczema of the breast, if it were really eczema, was shown in a certain per cent of cases to be a precursor of cancer, and the question of the early extirpation of the breast was a very important one. A similar clinical history was ascribed to icthyosis of the tongue. This in course of time is likely to eventuate in cancer. A like remark applies to old burns or scars on the lower extremity. If in advanced life these begin to ulcerate they are liable to become cancerous. So too of other conditions, such as syphilitic disease of the tongue.